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October 5, 2004

TO: Each Supervisor

FROM: Thomas L. Garthwaite, MD  
Director and Chief Medical Officer

**SUBJECT: LA County Health System Design**

Over the past two years, the Department of Health Services has been engaged in a process of moving from independent medical centers and clinics to an increasingly integrated delivery system. Our progress in this transformation can be noted by the following:

- Development and implementation of a single clinical data repository.
- Implementation of standardized pathways and protocols for disease management.
- System-wide quality and efficiency improvement processes and teams (patient safety, ICU's, consolidated purchasing, operating room supply standardization, laboratory testing standardization).
- Implementation of a Departmental Health Leadership Board that develops system-wide policies and shares best practices for implementation in each care setting.
- Implementation of a system-wide performance management system.
- Network accreditation for LAC+USC and its Comprehensive Health Centers and commitment to a strategy to obtain network accreditation in our other clusters.
- Consolidation of Inpatient Rehabilitation.
- Contracting of Pediatric Cardiovascular Surgery.
- Development of a regional plan for Neonatal Intensive Care Units.

- Conversion High Desert Hospital to a Multi-Specialty Ambulatory Care Center
- Focusing Rancho Los Amigos National Rehabilitation Center on rehabilitation services.
- Revamping DHS partnership with Department of Mental Health: transferred Augustus Hawkins outpatient facility to DMH, developed process to route mental health patients using the Medical Alert Center (MAC).
- Development of a written plan to integrate public and personal health.
- Redesign of the Public Private Partnership Program to emphasize strategic partnerships.
- Creation of a benefits package to assure consistent access to services across our system of care.
- Creation of central offices for nursing and for clinical affairs and affiliations.
- Development and deployment of system-wide cultural and linguistic standards.
- Consolidation of functions within Health Services Administration: human resources, billing, contracting and purchasing, external affairs.

Despite the progress noted above, the Department's movement toward fully integrated services has been slowed by 1) the uncertainty of our funding and the number of hospitals we would operate until January 2003 and 2) the uncertainty of our training programs and affiliations since May 2003. We have been further slowed by legal opinions regarding restrictions on intra-departmental transfers due to federal legislation (EMTALA). Specifically, we are significantly limited as to when we can preferentially transfer a patient from one DHS facility to another for a higher level of care.

Despite these impediments, we have made progress in the assessment and consolidation of our programs (Attachment I). While some have viewed system redesign as primarily a task of consolidating services, our goal is optimal design, rather than consolidation. In some cases, that will mean consolidation. In other cases, it may mean contracting out for services or even establishing new programs. Further, the facility profiles (Attachment II) indicate that services are already regionalized to a large extent.

## **Facility Profiles**

The Department conducted a comprehensive review of services by facility (Attachment II). The data reveals that our system has developed with significant consolidation of specialized services. LAC+USC has the most highly specialized programs and the most programs overall. Harbor/UCLA Medical Center also has a significant number of specialized programs. King/Drew Medical Center has a mixture of programs and falls between Harbor/UCLA and Olive View/UCLA Medical Centers in the number of specialty programs. Olive View/UCLA is an academic community hospital model and Rancho Los Amigos National Rehabilitation Hospital is primarily rehabilitative.

## Needs Based Planning

In preparation for the renegotiations of our medical school affiliation agreements, we have analyzed the disease burden and the current use of inpatient healthcare services (County and non-County) by Service Planning Area (SPA). Attachment III is an example that shows the number of hospitalizations for SPA-6 residents in all hospitals and for King/Drew Medical Center. We are using this data to plan for adjustments in our clinical and educational programs.

## Considerations and Future Direction

The following table details, on a programmatic basis, our working strategies to continue our evolution to becoming an integrated delivery system:

Radiology	The Department is working to develop the capacity to capture digital images and to transmit these images to remote sites. This projected use of telemedicine will lead to improved availability of and cost for interpretations. We are currently assessing the technical issues associated with adding this capability.
Laboratory	The Department plans to move to consolidate individual laboratories leading to a single DHS Laboratory Service. An outside team that has led a highly successful consolidation in the VA system will be sharing their experience with the DHS Leadership Board and Laboratory staff next week.
Dermatology	Dermatology evaluation by transmitted images is as effective as a face-to-face consultation in making a diagnosis in 75-85% of cases. Providing dermatology consults via telemedicine has the potential to markedly decrease waiting times and travel for consults and clinic appointments. We already provide a similar service for interpretation of digital images of the retinas of diabetic patients that leads to better service and increased efficiency.
Primary Care	We believe that every patient should have a primary care provider or team – although the episodic nature of our patient's use of our care system makes this difficult to achieve. Thus, we believe that family medicine and general internal medicine must be maintained or expanded.
Cardiovascular	Cardiovascular disease is, by far, the most common reason for hospitalization. To enhance the treatment of these diseases, we must pursue two strategies:

- 1) concentration of invasive cardiology to one or two centers,
- 2) expansion of non-invasive cardiology to include stress testing, echocardiography and lipid lowering efforts.

Neurology	Consolidate but maintain consultative presence.
Neurosurgery	Consolidate surgical sites but assure access to consultation.
Pediatrics	Consolidate inpatient but expand efforts in outpatient care – especially, develop the capacity to perform highly competent developmental disability examinations and treatments. Enhance care models to assure complete immunizations by improving the integration of personal and public health.
OB/GYN	The continued loss of obstetrics to the private sector seriously threatens the continuation of obstetrical services and neonatology in DHS. If the current efforts that are underway with LA County Obstetrics Department Chairs are unsuccessful in attracting obstetrical patients over the next year, we must consider consolidation and/or closure of OB. It is important to note that there is a real need to maintain gynecology services in the face of diminishing obstetrics.
Surgery Specialties	We will evaluate the need for various specialties in lieu of the potential closure of KDMC Trauma Unit. A recent UHC study of DHS identifies services where the volume of cases may not justify maintaining that service. We are examining that data.
Orthopedics	Orthopedic services are in high demand and limited supply. We will re-examine these services at King/Drew Medical Center in relation to the proposed probation of their training program and at Olive View/UCLA Medical Center where we currently must refer patients to LAC+USC Medical Center.

Attachment I lists the dates that we completed an action or the target timeframe for future decisions and actions. I welcome the chance to discuss these system re-design strategies with you as additional details emerge.

TLG:tlg

Attachments

c: Chief Administrative Officer  
County Counsel  
Executive Officer, Board of Supervisors

Attachment I. Completed and Potential System Changes.

#	Inpatient and Ancillary Services	Status	Completion Date or Target
1	Inpatient Rehabilitation	Completed	2003
2	Chronic Ventilator/Pulmonary Services	Completed	2003
3	Pediatric Orthopedic Surgery for Selected Neuromuscular Disorders	Completed	2003
4	Contract for Pediatric Cardiovascular Surgery	Completed	2003
5	Carotid Endarterectomy; Elective Abdominal Aortic Aneurysm; Cardiac Catheterization; Esophageal Cancer (low volume services reviewed for consolidation)	Completed  These services were deemed not feasible for consolidation	2003
6	Radiation Oncology	Reviewing the need to replace the radiation therapy equipment at Harbor-UCLA MC in relation to new capabilities in the new LAC+USC facility	2004
7	Neonatal Intensive Care Units (NICU's)	Regionalization plan has been completed and approved and will be implemented	2004
8	Standardization—Laboratories—Phase I	Completed protocols for hematology and HbA1C analyzers	2003

#	Inpatient and Ancillary Services	Status	Completion Date or Target
9	Standardization—Laboratories—Phase II	Developing restructuring protocols for microbiology and the chemistry and immuno-serology analyzers	2004-2005
10	System-wide design of Pathology Services	Consolidation of lab and pathology services	2004-2005
11	Radiology-Imaging Reading	Move to digital radiology and remote interpretation of digital images	2005-2006
13	Cardiovascular	Comprehensive review of needs and current capability	2004-2005
14	Neurosurgery, neurology	Consolidate	2005
15	Child Neurology	Potential for consolidation or contracting	2005
16	Dermatology & Ophthalmology	Opportunities for telemedicine	2005
17	Pediatrics Subspecialties	Regionalization of specialized pediatric services will be evaluated	2005
18	Orthopedics	Examine need, capacity and coordination among all DHS facilities	2004-2005
19	Psychiatry	Examine need, capacity and system design	2003-2005

Attachment II. Condensed View of Current DHS Programs by Facility.

DHS Hospital Profiles: Current Service Configuration

	LAC+USC		Harbor/UCLA		MLK/Drew		OV/UCLA		RLA		HDH
	IP	OP	IP	OP	IP	OP	IP	OP	IP	OP	OP
Dermatology	3	3	2	2	2	2	2	2			
Family Medicine			2	2	2	2		2			2
Internal Medicine	3	3	3	3	3	3	2	2			
Neurology	3	3	3	3	2	2	2	2			2
Pediatrics	3	3	3	3	3	3	2	2			
Psychiatry	3	3	3	3	3	3	2				
Psychology	3	3	3	3	3	2	2				2
Radiation Oncology	3	3	3	3	2						
Radiology	3	3	3	3	2	2	2	2	2	2	2
Rehabilitation	2	2	2	2		2			3	3	2
Emergency Medicine	N/A	3	N/A	3	N/A	2	N/A	2	N/A		
Long-Term Care		N/A		N/A		N/A		N/A		N/A	N/A
Urgent Care Services	N/A	2	N/A	2	N/A	2	N/A	2	N/A		
Anesthesiology	3	3	3	3	3	3	2	2			2
Dentistry	3	3	0	0							
Cardiothoracic Surgery	3	N/A	3	N/A		N/A		N/A		N/A	N/A
Cranio-facial Services	2	2	3	3			3	3			
General Surgery	3	3	3	3	3	3	2	2			
Neurosurgery	3	N/A	3	N/A	3	N/A		N/A		N/A	N/A
OB/Gyn	3	3	3	3	2	3	2	2			2
Ophthalmology	3	3	3	3	3	3	2	2			
Optometry	N/A		N/A	C	N/A	3	N/A	2	N/A		C
Oral & Maxillofacial Surgery	3	3	2	2	2	2	2	2			
Orthopedics	3	3	3	3	2	2					2
Otolaryngology	3	3	3	3	3	3	2	2			2
Pathology	3	3	3	3	2	2	2	2			
Podiatry	2	2			2	2	3	3			2
Urology	3	3	3	3	2	2	2	2			2

0 = No service; 1 = Limited (transfer or call in); 2 = Standard (on staff); 3 = Advanced Capabilities (tertiary level); N/A = Not applicable

Attachment III. Needs based planning example for SPA-6.



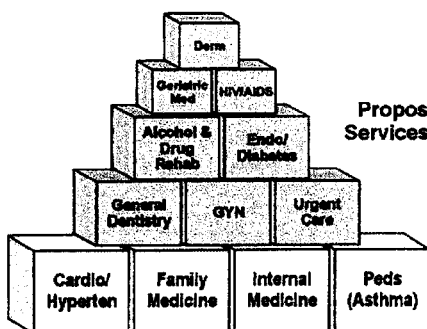
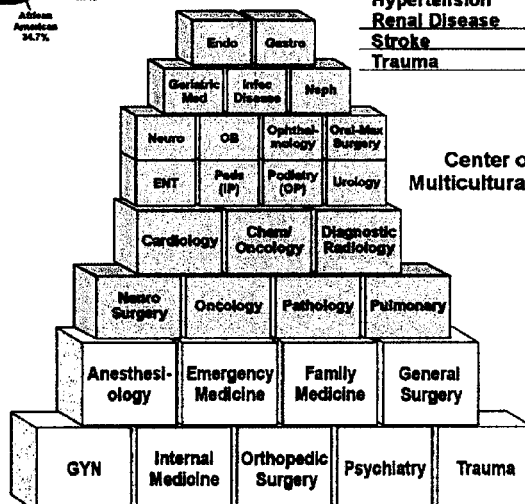
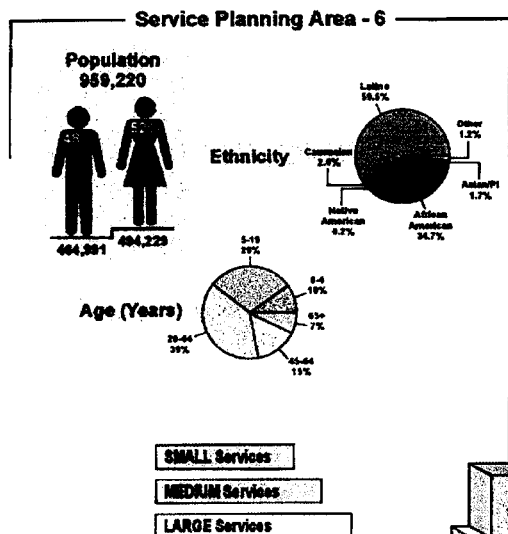
**Service Planning Area - 6**  
**Demographics and Prevalence**  
**Inpatient, Outpatient and System-wide Services (Proposed)**  
**L.A. County King/Drew Medical Center**

**DRAFT**

Source: U.S. Census Bureau-2000

• Disease Prevalence

	SPA-6 Discharges	KDMC Utilization	SPA-6 Uninsured	KDMC Uninsured
Asthma	3,433	11%	258	28%
Cancer	2,549	6%	229	33%
Depression	559	11%	152	20%
Diabetes	1,881	11%	327	27%
Heart Disease	11,353	7%	744	27%
Hypertension	599	18%	71	35%
Hypertension Renal Disease	1,262	12%	53	9%
Stroke	2,737	6%	202	19%
Trauma	1,042	34%	322	33%



• Disease Prevalence

	SPA-6 Discharges	KDMC Utilization	SPA-6 Uninsured	KDMC Uninsured
Alcohol Depend	147	5%	29	14%
Drug Overdose	507	10%	93	11%
HIV/AIDS	774	11%	84	24%

